

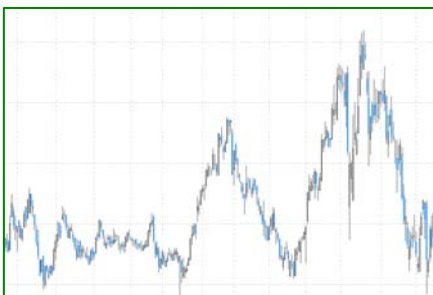


Tianneng Power International Limited

Share Data

Price (21/10/2011)	HK\$3.40
52 wk high/low (HK\$)	5.10/2.88
Stock code	819
Issued shares (mn)	1,089.80
Market cap (HK\$ mn)	3,705.32
Free-float	55.87%
15-day avg vol (mn)	3.226
Auditors	Deloitte
Major shareholders:	
Zhang Tianren*	36.59%
Deutsche Bank	8.00%

* Chairman of Company



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Tianneng Power (819) - BUY

We had a meeting with the Vice President of Tianneng's Power (819). We believe the market has over-reacted to recent ASP cut, providing a good entry point for investors.

Investment Themes

- According to Tianneng, the price cut in Oct is due to a 12.4% drop in lead price during Sep. But given 2 price hikes of about 8-10% each in Jul and Aug with falling lead costs, which accounted for 60-70% of total production costs, market leaders are still enjoying a sweet margin.
- Tianneng sets to gain market share during industry consolidation. Sales volume is expected to grow by 19.2% YoY to 45mn units in 2011 and 44.4% YoY to 65mn units in 2012.
- We predict FY2011 fully-diluted EPS to be Rmb0.5031/share, up 68.1% YoY. The counter is trading at est. FY2011 PER of 5.54x and P/B of 1.29x with expected FY2011 ROAA of 16.1% and ROAE of 26.9%.
- We set 1-year target price at HK\$4.70, representing FY2012 PER of 10x. BUY.
- Potential driver not factored in – benefits of vertical integration from newly built recycling plant: The plant construction started in Jun 09, and expected NP margin was 8-9%, based on the group's estimates in 2009. If successful, the recycled lead is expected to lower total unit costs by 5-7%. The early investment made by Tianneng gives the group a competitive advantage over its local peers in terms of lower production costs and potential expenses on environmental issues.

Results & Forecasts

FY ended Dec 31	2009	2010	2011E	2012E
Revenue (Rmb mn)	2,254.9	3,752.8	5,207.0	6,618.6
Chg (%YoY)	-12.78%	66.43%	38.75%	27.11%
Net profit (Rmb mn)	270.7	346.3	581.1	444.7
Chg (%YoY)	15.58%	27.92%	67.80%	-23.46%
Fully-diluted EPS(Rmb)	0.2430	0.2993	0.5031	0.3851
Chg (%YoY)	7.02%	23.15%	68.11%	-23.46%
PER (x)	-	9.32	5.54	7.24
DPS (Rmb)	0.0780	0.0976	0.1600	0.1224
Yield	-	3.50%	5.74%	4.39%
NBV (Rmb/share)	1.5579	1.8057	2.1687	2.4544
P/B (x)	-	1.54	1.29	1.14

@Rmb0.8200/HK\$

Source: ABCI Securities estimates; Company reports

Report date: 21 Oct, 2011

Analyst:

Lisa Lee (lisa.lee@abci.com.hk)

Tel: (852) 21478809

Please also refer to:

Lead-acid Batteries Industry Report (20110915)

Chaowei (951) Research Report (20111006)



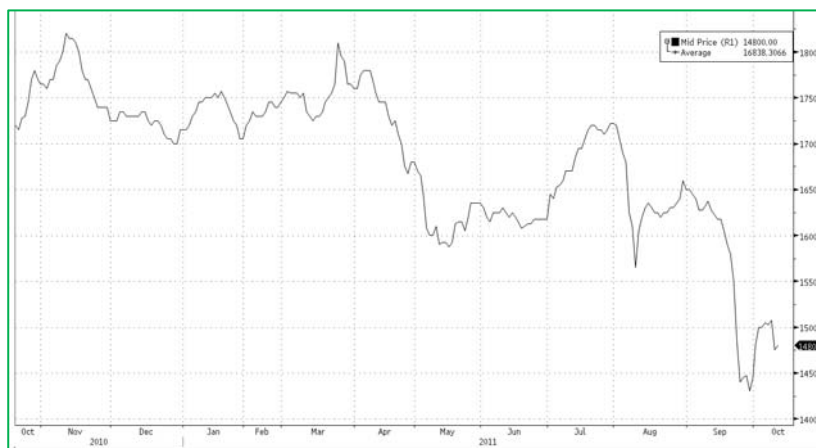
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Update on industry outlook

In our Chaowei (951) report issued on 06/10/11, we have mentioned that the sudden decline in supply has driven up the ASP of lead-acid motive batteries, the first time that the price of batteries moved not in accordance to lead price, which accounted for 60-70% of production costs.

However, on 11 Oct, we confirmed with the market leaders, Chaowei (951) and Tianneng (819) that both of their companies have cut their product price by 7-10% on average due to a 12.4% decline in lead price in Sep. Lead price reached as high as Rmb 17,200/ton in Jul but dropped below Rmb 15,000/ton in end of Sep.

Lead spot price (19/10/2010 – 19/10/2011)



Source: Bloomberg

But apart from the drop in costs of major raw materials, we believe that some of the manufacturers, which have been forced to suspend production in Jul, has resumed operation, and the gap between demand and supply is narrowing faster than we expected. We forecasted in our Chaowei's report that the situation will last till 1H2012.

Nevertheless, given 2 price hikes of about 8-10% each in Jul and Aug with falling lead costs, the market leaders are still enjoying a sweet GP margin. Due to the high volatility in our assumed variables, we do a sensitivity test, estimating the effect of ASP and lead price have on Tianneng's net profit.

Our sensitivity analysis shows that Tianneng's net profit is sensitive to both ASP and lead price and the change in ASP has a much larger impact on Tianneng's net profit than for the same % change in lead price. We estimate that +/-5% change in ASP will lead to +/-29.1% change in net profit; while +/-5% change in lead price will lead to +/-16.0% change in net profit. The tests explain the high volatility of share price movements were partly caused by the fluctuations in ASP and lead price.



Sensitivity Analysis

	2009	2010	2011E
Base case	270.7	346.3	581.1
Case 1: Battery ASP is 5% lower than base case deviation from base case			412.2 -29.1%
Case 2: Battery ASP is 5% higher than base case deviation from base case			750.0 29.1%
Case 3: Lead price is 5% lower than base case deviation from base case			674.1 +16.0%
Case 4: Lead price is 5% higher than base case deviation from base case			488.1 -16.0%

Source: ABCI Securities estimates

Highlights

Sales growth: As one of the market leaders of the sector, Tianneng, like Chaowei, is set to gain market share during industry consolidation. We expect sales volume to increase by 19.2% YoY to 45mn units in 2011 and 44.4% YoY to 65mn units in 2012.

Potential driver not factored in – Benefits of vertical integration from newly built recycling plant: One of the major factors which differentiate Tianneng and Chaowei is Tianneng's recycling plant, which will commence operation in the end of this year.

The plant construction started in Jun 09 and expected NP margin was 8-9%, based on the group's estimates in 2009. Upon completion, the plant can process an annual capacity of 150,000 tons of used lead acid batteries. Recycled lead will be sold to third parties as well as for self consumption.

Taking advantage of its extensive distribution network, Tianneng will collect the used battery through their existing distributors.

If successful, the recycled lead is expected to lower total unit costs by 5-7%. Moreover, the increasing popularity of e-bikes and hence the increasing demand in lead-acid motive batteries will, sooner or later, raise up the environmental issues of batteries disposal, and batteries manufacturers may be encouraged to take up the social responsibilities e.g. battery recycling. The early investment made by Tianneng gives the group a competitive advantage over local peers of in terms of lower production costs and potential expenses on environmental issues.

But with great uncertainties and to be conservative (Please also refer to our risk factors on P.5), we have not yet factor in the potential benefit into our forecast model.



Valuation

With major assumptions set out below, we estimated 2011 fully-diluted EPS to be Rmb0.5031/share; 2012 EPS to be Rmb0.3851/share. With 2012 PE of 10x, we value the stock at Rmb3.85/share (or HK\$4.70).

Major Assumptions	2009	2010	2011	2012	Explanations
Sales volume – e-bikes (mn)	24.7	37.8	45.0	65.0	Year end production capacity is 65 mn at the end of 2011
Growth	53.0%	19.2%	44.4%	53.0%	
ASP (Rmb/unit)	86.5	93.4	115.7	101.8	Av ASP was Rmb110.2 in 1H2011. ASP est in 2011 is based on 2 price hikes of 8-10% each in Jul and Aug 2011 and one price cut of 10% (in primary market only) in Oct. Assume more of the suspended manufacturers are resuming their production and ASP will be changed in accordance to lead price again. In Q42011
Growth	-17.38%	7.98%	23.89%	-12.00%	
Av lead price (Rmb/tonne)	13,818	16,115	16,700	15,000	Av lead purchase price was Rmb16,900/ton in 1H11 but lead price dropped >15% during Jul to Sep to less than Rmb15,000/ton.
Consumption rate of lead (kg/unit)	3.0	3.2	3.3	3.3	Increase every year with inflation.
Av unit cost - lead (Rmb/unit)	40.9	52.3	57.9	49.5	
Av unit cost - non-lead (Rmb/unit)	24.1	24.0	26.4	28.6	
Total unit cost (Rmb/unit)	65.01	76.31	84.31	75.58	
GP margin	24.84%	18.30%	27.14%	25.77%	

Scenario analysis

Assuming 2012 sales volume = 65mn units (our base case sales volume)

Fully-Diluted EPS (Rmb)	Lead price (Rmb/ tonne)			
	17,000	16,000	15,000	14,000
95.0	(0.1427)	(0.0034)	0.1359	0.2752
Battery ASP	0.1065	0.2458	0.3851	0.5244
(Rmb/unit)	0.2224	0.3617	0.5010	0.6403
110.0	0.4050	0.5443	0.6836	0.8229

Source: ABCI Securities estimates

Fair value assuming PE of 10.0x (HK\$)	Lead price (Rmb/ tonne)			
	17,000	16,000	15,000	14,000
95.0	-	-	1.66	3.36
Battery ASP	1.30	3.00	4.70	6.40
(Rmb/unit)	2.71	4.41	6.11	7.81
110.0	4.94	6.64	8.34	10.04

Source: ABCI Securities estimates



Risk factors:

- **New business development risks:** In addition to the opportunities it brings to Tianneng, the recycling plant brings in additional business development risks and operational risks.

Existing recycling plants in China are facing the problems of not able to collect reused batteries at reasonable prices. Due to their unethical way of disposing waster water and lead residuals, and hence a much lower processing costs, small and unqualified manufacturers are always able to offer a higher battery collection prices than qualified firms. According to China Battery Industry Association(中国电池工业协会), 80% of the recycled lead-acid batteries in China are collected by local individuals, which are then transported to unqualified small refining firms. In our view, the success of Tianneng's recycling plant depends highly on how effective government can implement its policies and controls on unqualified firms.

- **Concerns on business diversification:** The diversification approach also raise our concern on management's view on the outlook of the existing core business.
- **Policy risks** – Driving licenses are not required for e-bikes in China. For safety concerns, e-bikes are prohibited in some of the cities including Guangzhou and Zhuhai. In Jul 2011, Shenzhen has also banned the use of e-bike in main downtown areas, effective till Dec 2011. Although we have mentioned e-bikes are encouraged in rural areas, increasing usage of e-bikes in some of the first and second tier cities in China remain a downside risks to the demand for lead-batteries.
- **Regulation risks** – In Jun 2011, the Ministry of Industry Information and Information Technology urges local authorities to use the existing e-bikes standards that were published in 1999 to regulate the manufacture and use of e-bikes. Under those requirements, e-bikes can weigh no more than 40kg with a speed limit of 20km/hour. However, the bulk of the estimated 120mn e-bikes in China has designed capacity of 30-40km/hour and typically carry four batteries, which by themselves weigh at least 16-28kg. The tightening management in existing standards may phase out many of the existing e-bikes, affecting the demand for lead-acid motive batteries.
- **Substitution risks** –Currently, the cost of producing lithium battery is 3 times more than producing a lead-acid battery. The increase in the price of lead-acid battery will lead to an increase in the substitution risks to lithium batteries. Apart from cost, stability issue is a major concern for limited use of lithium-ion batteries in e-bikes, but a technical breakthrough may lead to obsolesce of lead-acid batteries.



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● **Share price risks**

Tianneng's 30-day and 60-day volatility is 1.86x and 2.07x of HSI, indicating a higher-than-market share price risks.

	30-day Volatility (%)	60-day Volatility (%)
HSI	40.83	36.43
Tianneng(819)	76.09	75.29

Source: Bloomberg

In addition, there are a total of 65.1mn of share options outstanding, which accounted for 5.63% of total number of shares after all shares options are exercised. Out of the 65.1mn of share options, 22.8mn are exercisable at HK\$1.22 and 42.3mn are exercisable at HK\$3.18, which are lower than current share price. Therefore we use fully-diluted EPS in our valuation to factor in possible conversion from share options. But the potential increase in the supply of shares will increase the downside risks to share price.



Financial Analysis

P&L

For the yr ended 31 Dec (Rmb mn)	2009	2010	2011E	2012E
Revenue	2,254.9	3,752.8	5,207.0	6,618.6
CoS	(1,613.1)	(2,881.4)	(3,669.8)	(5,073.6)
Gross profit	641.8	871.4	1,537.2	1,545.0
Other income	62.2	74.8	52.1	66.2
S&D	(197.1)	(224.7)	(312.4)	(397.1)
Admin	(83.4)	(110.9)	(208.3)	(264.7)
R&D	(65.3)	(112.4)	(156.2)	(198.6)
Other expenses	(25.2)	(55.1)	(78.1)	(99.3)
Share of associate	0.0	0.0	0.0	1.0
EBIT	333.0	443.1	834.2	652.5
Finance costs	(13.3)	(14.3)	(59.5)	(59.5)
EBT	319.7	428.8	774.7	593.0
Tax	(49.0)	(82.5)	(193.7)	(148.2)
Net profit	270.7	346.3	581.1	444.7
Chg (YoY)	15.58%	27.92%	67.80%	-23.46%
D&A	52.0	65.4	99.8	127.3
EBITDA	385.0	508.4	934.0	779.8
Dividend	83.7	105.7	174.3	133.4
DPS (Rmb)	0.0780	0.0976	0.1600	0.1224
Basic EPS (Rmb)	0.2506	0.3196	0.5332	0.4081
Fully-diluted EPS (Rmb)	0.2430	0.2993	0.5031	0.3851
NBV (Rmb/share)	1.5579	1.8057	2.1687	2.4544
No. of issued shares (mn)	1,080.0	1083.3	1,089.8	1,089.8
No. of issuable shares				
Share options @ HK\$1.22	33.8	29.5	22.8	22.8
Share options @ HK\$3.18	0.0	44.2	42.3	42.3
Total no. of diluted shares	1,113.8	1,157.0	1,154.8	1,154.8

Source: ABCI Securities estimates; Company reports

Major Financial Ratios

For the yr ended 31 Dec (Rmb mn)	2009	2010	2011E	2012E
Profitability				
GP Margin	28.46%	23.22%	29.52%	23.34%
EBITDA Margin	17.07%	13.55%	17.94%	11.78%
EBIT Margin	14.77%	11.81%	16.02%	9.86%
EBT Margin	14.18%	11.42%	14.88%	8.96%
NP Margin	12.00%	9.23%	11.16%	6.72%
ROAA	13.79%	12.96%	16.06%	9.86%
ROAE	18.55%	19.03%	26.90%	17.65%
Working capital management				
Avg. inventories/COGS (days)	85.4	160.4	120.0	120
Avg. trade receivables/turnover (days)	36.7	81.7	80.0	80
Avg. trade payables/COGS (days)	61.4	111.5	110.0	110
Liquidity				
Current ratio	2.48	1.77	1.43	1.32
Quick ratio	1.44	1.03	1.21	0.73
Equity/ Assets	74.50%	63.42%	56.92%	54.91%
Net Debt/ Total Equity	-19.92%	2.85%	-14.21%	24.22%

Source: ABCI Securities estimates; Company reports



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Balance Sheet

As at 31 Dec (Rmb mn)	2009	2010	2011E	2012E
PPE	712.7	981.6	1,483.9	1,858.6
Prepaid lease payments	84.4	97.3	95.3	93.3
Others	30.4	60.6	60.6	60.6
Non-current assets	827.4	1,139.5	1,639.7	2,012.5
Inventories	599.1	818.8	387.7	1,280.3
Held-for-trading investments	0.0	0.0	90.0	90.0
Bills, trade and other receivables	374.9	634.8	506.4	944.2
Prepaid lease payments	1.8	2.1	2.1	2.1
Amount due from a related company	0.0	0.0	0.0	0.0
Restricted bank deposits	94.8	65.0	65.0	65.0
Bank balances and cash	360.3	424.3	1,460.9	477.1
Current assets	1,431.0	1,945.0	2,512.1	2,858.7
Total assets	1,414.0	2,686.8	3,509.3	4,132.7
Bills, trade and other payables	440.2	545.4	560.5	968.5
Amount due to a related company	0.0	0.0	0.0	0.0
Taxation payable	15.7	37.9	37.9	37.9
Bank borrowings	120.0	515.0	1,160.0	1,160.0
Current liabilities	575.9	1,098.4	1,758.4	2,166.4
Bank borrowings	0.0	30.0	30.0	30.0
Deferred tax liabilities	0.0	0.0	0.0	0.0
Non-current liabilities	0.0	30.0	30.0	30.0
Total liabilities	2,258.4	3,084.5	4,151.9	4,871.2
Net assets	1,682.5	1,956.2	2,363.4	2,674.7
Capital & reserves:				
Share capital	106.1	106.4	106.9	106.9
Reserves	1,576.4	1,849.8	2,256.5	2,567.8
Total equity	1,682.5	1,956.2	2,363.4	2,674.7

Source: ABCI Securities estimates; Company reports

Cash Flow

For the yr ended 31 Dec (Rmb mn)	2009	2010	2011E	2012E
EBITDA	385.0	508.4	934.0	779.8
Change in inventories	(231.2)	(219.7)	431.0	(892.6)
Change in bills, trade and other receivables	(234.9)	(254.6)	128.4	(437.8)
Change in trade payables	187.9	89.7	15.1	408.0
Others	(27.0)	19.5	(90.0)	0.0
Cash (used in)/generated from operations	79.9	143.3	1,418.5	(142.6)
Interest paid	(13.0)	(14.0)	(59.5)	(59.5)
Income tax paid	(44.2)	(68.1)	(193.7)	(148.2)
CF from operating activities	22.6	61.2	1,165.4	(350.4)
Cash flows from investing activities	(292.1)	(341.9)	(600.0)	(500.0)
Cash flows from financing activities	99.4	344.7	471.2	(133.4)
Change in cash and cash equivalents	(170.1)	64.0	1,036.6	(983.8)
Cash and cash equivalents at beg of year	530.4	360.3	424.3	1,460.9
Cash and cash equivalents at end of year	360.3	424.3	1,460.9	477.1

Source: ABCI Securities estimates; Company reports



Disclosures

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